



February 28, 2013

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
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601 D Street
Washington, D.C. 20044-7611
DJ# 90-5-2-1-08242

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APCO

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Regional Administrator
U.S. EPA Region VII
11201 Renner Blvd.
Lenexa, Kansas 66219

Section Chief, Compliance and Enforcement Section
Bureau of Air and Radiation
Kansas Department of Health and Environment
1000 SW Jackson, Suite 310
Topeka, Kansas 66612-1366

RE: *U.S. v Westar Energy, Inc.*, 09-CV-2059 JAR/DRW
Consent Decree Semi-Annual Progress Report

Dear Sir or Madam:

Attached hereto for your review is the Periodic Progress Report of Westar Energy, Inc. This report is submitted in compliance with Paragraph 113 of the Consent Decree in the above matter.

This Periodic Progress Report covers the period beginning July 1, 2012 through December 31, 2012. This Periodic Progress Report has been certified by Westar Energy Inc.'s Designated Representative, John Bridson, who is the Responsible Official under the Title V Program for our Acid Rain Program Affected Sources.

Should you have any questions regarding this Progress Report, please do not hesitate to contact me at 785-575-1614 or via e-mail at Dan.Wilkus@westarenergy.com.

Sincerely,

Westar Energy, Inc.

A handwritten signature in black ink, appearing to read 'D. Wilkus', with a long horizontal flourish extending to the right.

Daniel R. Wilkus, P.E.
Director, Air Programs

Cc: John Knodel, Region VII EPA
Mark Elmer, Department of Justice

PERIODIC REPORT OF WESTAR ENERGY, INC.
PURSUANT TO PART XI OF THE CONSENT DECREE
ENTERED IN CIVIL ACTION NO. 09-CV-2059
FOR THE PERIOD JULY 1, 2012 THROUGH DECEMBER 31, 2012

Westar Energy, Inc. ("Westar") submits this Progress Report pursuant to Sections VIII, XI and Appendix A of the Consent Decree entered in *United States of America and State of Kansas v. Westar Energy, Inc.*, Civil Action Number 09-CV-2059 (the "Consent Decree"). This Progress Report covers the period beginning July 1, 2012 through December 31, 2012 (the "Report Period").

In accordance Sections VIII, XI and Appendix A of the Consent Decree, Westar must provide the following information in this Periodic Report.

- a. All information necessary to determine compliance with the requirements of the following paragraphs of the Consent Decree: Paragraphs 50 through 68 concerning NO_x emissions monitoring, and the surrender of NO_x Allowances; Paragraphs 69 through 81 concerning SO₂ emissions and monitoring, and the surrender of SO₂ Allowances; and Paragraphs 82 through 87 concerning PM emissions and monitoring. Westar shall include in these reports all data for which the bias adjustment factor has been excluded pursuant to Paragraphs 67 and 80;*
- b. All data recorded by the PM CEMS as required by Paragraph 91, and all periods of monitor Malfunction, maintenance, and/or repair as provided in Paragraph 88;*
- c. All information relating to Super-Compliance NO_x and SO₂ Allowances that have been generated in accordance with Paragraphs 64 and 76 through compliance beyond the requirements of the Consent Decree;*
- d. All information indicating that the installation and commencement of operation for a pollution control device may be delayed, including the nature and cause of the delay, and any steps taken by Westar to mitigate such delay; and*
- e. All information relating to the NO_x Offset Requirements pursuant to Paragraph 121.*
- f. Written reports detailing the progress of each environmental mitigation plan project, including accounting of Project Dollars spent to date, as provided in item C of Appendix A.*

I. Compliance status with Paragraphs 50 through 68 – NO_x Emissions and Monitoring, and Surrender of NO_x Allowances.

Paragraph 50 – Westar was in compliance with the optimization requirements in Paragraph 50 during the Report Period. Prior to and by December 31, 2011, Westar timely began continuously operating the Low NO_x Combustion Systems

at JEC Units 1 and 3 to achieve the 30-day Rolling Average Unit Emission Rate for NO_x of no greater than 0.180 lb/mmBtu. Attachment A contains the 30-day rolling average unit emission rate data for JEC Units 1 and 3.

Paragraph 51 – Westar installed the required new Low NO_x Combustion System on JEC Unit 2 in an outage prior to December 31, 2011 and began continuously operating it. Westar maintained compliance with the 30-day rolling average unit emission rate of 0.180 lb/mmBtu by December 31, 2011. Attachment A contains the 30-Day Rolling Average Unit Emission Rate data for JEC Unit 2.

Paragraph 52 – Westar continuously operated the existing Low NO_x Combustion Systems on JEC Units 1, 2 and 3, at all times the Units were operating, consistent with technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the systems during the time periods required by the Consent Decree during the Report Period.

Paragraph 53 and 54 – Westar is on schedule to install and commence continuous operation of an SCR on one of the JEC Units no later than December 31, 2014.

Paragraph 55 – On June 24, 2010, Westar engaged an engineering firm to assist Westar in testing, evaluating, and analyzing other NO_x reduction technologies for JEC, including SNCR. To-date an SNCR and upgraded Low NO_x Burner System have been installed on JEC Unit 3. During this report period Westar completed the evaluation of NO_x technologies.

Paragraphs 56–On December 10, 2012, Westar provided written notice to EPA and KDHE of the election to comply with the 0.100 lb/mmBTU Plant-Wide 30-Day Rolling Average Emission Rate for NO_x in Paragraph 58(a).

Paragraph 57, 58, and 59 – With the election in Paragraph 56 to comply with the Plant-Wide 30-Day Rolling Average Emission Rate for NO_x, Paragraph 57 requires compliance with Paragraph 58 and notes that the requirements of Paragraph 59 are no longer applicable. Paragraph 58 contains future compliance requirements for which no update is required during this Report Period.

Paragraph 60 – Westar was in compliance with the use of NO_x Allowances requirements in Paragraph 60 during the Report Period.

Paragraphs 61, 62, 63, 64, 65, and 66 –These paragraphs contain NO_x surrender requirements for which no update is required during this Report Period.

Paragraphs 67 and 68 – During the Report Period, Westar used NO_x continuous emission monitors (CEMs) in accordance with Paragraph 67 in order to calculate the NO_x 30-Day Rolling Average Unit Emission Rate for each Unit. Attachment

A contains the NO_x data for which the bias adjustment factor has been excluded. Paragraph 68 contains NO_x monitoring provisions pertaining to future compliance requirements for which no update is required during this Report Period.

II. Compliance status with Paragraphs 69 through 81 – SO₂ Emission and Monitoring, and Surrender of SO₂ Allowances.

Paragraph 69 – Westar began monitoring and recordkeeping for the Plant-Wide 12-month rolling tonnage limitation for SO₂ on June 1, 2010. Westar began timely complying with the Plant-Wide 12-month rolling tonnage limitation for SO₂ on June 24, 2010, ninety days after Consent Decree entry Westar first demonstrated compliance with the limitation on June 1, 2011, as agreed to by USEPA Region VII and the Kansas Department of Health and Environment during Westar's initial kick-off meeting on April 28, 2010. Westar remained in compliance with the tonnage limitation on June 24, 2011, twelve months after the date of commencement of the limitation in accordance with Paragraph 177. During this Reporting Period, the highest 12-month rolling SO₂ tonnage was 1339.52 tons which is well below the 6,600 ton SO₂ 12-month rolling tonnage limitation contained in Paragraph 69. Attachment B contains the Plant-Wide SO₂ 12-month rolling tonnages during this Report Period.

Paragraph 70 – During the Report Period, Westar continuously operated FGDs on all three Units to achieve and maintain a SO₂ 30-Day Rolling Average Unit Emission Rate for Units 1, 2 and 3 of no greater than 0.070 lb/mmBtu. Attachment C contains the SO₂ 30-Day Rolling Average Unit Emission Rate for Units 1, 2 and 3 during the Report Period.

Paragraph 71 – During the Report Period, Westar operated each FGD at all times in which the Unit was operating, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the FGDs to minimize emissions to the extent practicable.

Paragraph 72 – Westar was in compliance with the use of SO₂ Allowances requirements in Paragraph 72 during the Report Period.

Paragraphs 73 – This paragraph contains SO₂ surrender requirements for which no update is required during this Report Period.

Paragraph 74, 75, 76, 77, 78, and 79 – These paragraphs contain SO₂ surrender and Super-Compliance Allowance requirements for which no update is required during this Report Period.

Paragraph 80 – During the Report Period, Westar used SO₂ continuous emission monitors (CEMs) in accordance with Paragraph 80 in order to calculate the SO₂ 30-Day Rolling Average Unit Emission Rate for each Unit. Attachment C contains SO₂ data for which the bias adjustment factor has been excluded. Additionally, during the Report Period, RATA testing was conducted on Unit 3. The results of the RATA testing were submitted to EPA via the EDR.

Paragraph 81 – During the Report Period, Westar used CEMs in accordance with Paragraph 81 to calculate the Plant-Wide 12-Month Rolling Tonnage limitation for SO₂. Attachment B contains the SO₂ Plant-Wide 12-month rolling tonnages during this Report Period.

III. Compliance Status with Paragraphs 82 through 87 – PM Emission and Monitoring.

Paragraph 82 – During the Report Period, Westar operated each ESP and FGD system on each JEC Unit, to maximize the PM emission reductions at all times when the Units were in operation, consistent with technological limitations, manufacturers' specifications, and good engineering and maintenance practices in accordance with this Paragraph.

Paragraphs 83 – Westar rebuilt the JEC Unit 2 and Unit 1 ESPs during the Spring 2011 and 2012 maintenance outages, respectively, achieving early compliance with the requirements in this Paragraph for both units. Performance testing was conducted on June 16, 2011 for JEC Unit 2 and on June 20, 2012 for JEC Unit 1, 2012 demonstrating compliance with the PM Emissions Rate and satisfying the requirement to conduct the testing within 270 days after rebuilding each ESP. The results of the JEC Unit 2 compliance testing were submitted on August 10, 2011; the results of the JEC Unit 1 compliance testing were submitted on July 31, 2012. Westar has now satisfied all current and future requirements contained in this Paragraph.

Paragraph 84 – In addition to continuously operating the ESPs and FGD system at each JEC Unit, Westar operated the Units in accordance with this provision and demonstrated compliance with the 0.030 lb/mmBTU PM emission limit during stack testing which was conducted in June 2012.

Paragraphs 85, 86 and 87 - The required compliance and condensable testing as outlined in these paragraphs was conducted on June 20, 2012 (Unit 1), June 23, 2012 (Unit 2) and June 19, 2012 (Unit 3). The results of these tests were submitted to KDHE and EPA on July 31, 2012. These tests complied with the reference measures and procedures in Paragraphs 86 and 87.

IV. Compliance Status with Paragraphs 88 and 91 – all data recorded by PM CEMs, and all periods of monitor malfunction, maintenance and/or repair.

Paragraphs 88 – Westar installed and correlated a PM CEMS for JEC Unit 2 prior to December 31, 2011, demonstrating early compliance with the Consent Decree. The PM CEMS is maintained and operated as specified in the Consent Decree. Attachment D contains a summary of all periods of monitor malfunction, maintenance, and/or repair during the Report Period.

Paragraph 89 – On January 18, 2011, Westar submitted to KDHE and EPA a plan for the installation and correlation of the PM CEMs. The plan was submitted no later than 90 days prior to installation of the PM CEMs.

Paragraph 90 – On March 4, 2011, Westar submitted to KDHE and EPA a proposed Quality Assurance/Quality Control (QA/QC) protocol for the PM CEMs. The plan was submitted no later than 45 days prior to installation of the PM CEMs. Westar operated the PM CEMs in accordance with this protocol during the Report Period.

Paragraph 91 – Attachment E contains a CD with the data recorded by the PM CEMs during this Report Period. The data is expressed in lb/mmBtu on a 3-hour rolling average basis.

V. All information related to Super-Compliant NO_x and SO₂ Allowances that Westar claims to have generated in accordance with Paragraphs 64 and 76.

Paragraphs 64 and 76 – See Paragraphs 64 and 76 above for information related to the Super-Compliance NO_x and SO₂ Allowances.

VI. All information indicating that the installation and commencement of operation for a pollution control device may be delayed.

During this Report Period, there were no indications of any delays of the installation or operation of any pollution control devices required by this Consent Decree.

VII. All information relating to the NO_x Offset Requirements pursuant to Paragraph 121.

This Paragraph did not apply during this Report Period because Westar did not receive a written demand for stipulated penalties. No compliance related information is available and necessary to report at this time.

VIII. Compliance Status with Appendix A and the USEPA-approved Environmental Mitigation Project Plans

Pursuant to the correspondence between EPA and Westar dated November 12, 2010, Westar is submitting its report related to environmental mitigation projects (the "Projects") consistent with its schedule for periodic reports in Paragraph 113 of the Consent Decree. This year-end report contains a more detailed report concerning the implementation of the Projects. The mid-year report will be a shorter report concerning these Projects. Westar will proceed on this schedule for all future periodic reports. That letter resolved the inconsistency regarding reporting requirements in Paragraphs 107 and 113 of the Consent Decree.

In accordance with Appendix A, Paragraph I.C, Westar provides the following information detailing the progress of each Project it has elected. Below, Westar provides an annual accounting of Project Dollars spent for each project. In correspondence between Westar and EPA dated July 26, 2010, Westar elected to participate in the Clean Diesel Retrofit Project, the Third Party Wind Generation Project and the Fleet Conversion Project. On May 22, 2012, Westar received EPA approval to implement a plug-in hybrid infrastructure project. Westar elected not to pursue or submit a plan concerning an advanced truck stop electrification project.

Additionally, although outside of this 2012 year-end reporting period, as discussed during the January 11, 2013 meeting held at USEPA Region VII and as summarized in Westar's letter to USEPA dated January 16, 2013, Westar is interested in reallocating some Environmental Mitigation Project Dollars from currently approved USEPA projects to new projects anticipated to provide a greater benefit. Westar is working with USEPA to effectuate this reallocation.

Fleet Conversion Project Plan

On September 2, 2010, USEPA approved Westar's Fleet Conversion Project Plan.

With the constantly changing and emerging hybrid/electric vehicle technology, Westar will periodically re-evaluate the anticipated schedule contained in Appendix A of the Plan.

During this Report Period, Westar purchased and took delivery of three Altec bucket trucks. Additionally during this Report Period, Westar installed 26 electric vehicle charging stations at Westar facilities in support of the new electric/hybrid fleet cars. Seventeen of these charging stations are also available to the public.

During calendar year 2012, which includes this Report Period, Westar spent \$1,085,752.60.

Westar is on schedule to complete the entire Fleet Conversion Project by March 26, 2015.

Third Party Wind Generation Project Plan

On September 2, 2010, USEPA approved Westar's Third-Party Wind Generation Project Plan.

On December 16, 2010, Westar entered into an Agreement with the Unified School District (USD) 501 in Topeka, Kansas, to donate at least \$200,000 and up to \$250,000 toward the purchase and installation of a 100 kW electric generation wind turbine ("wind turbine"). On December 21, 2010, Westar contributed \$200,000 to USD 501. In early 2012, the Topeka USD 501 turbine was installed at the "KANZA Business and Technology Park" located in Topeka, Kansas. This wind turbine is now operational. Also in early 2012, wind turbines were installed at Halstead and Circle high schools.

During this Report Period, wind turbines were installed for Flint Hills Technical College and Otis Bison USD 403. Funding agreements are in place for Washburn Rural USD437 and Western Plains USD 106. Construction of the wind turbines at these schools are planned to occur in the Spring of 2013. Cost development and funding agreements are underway with Perry-Lecompton USD 343, St. John USD 350 and Santa Fe Trail USD 434.

During calendar year 2012, which includes this Report Period, Westar spent \$93,846.22.

Westar is on schedule to complete the entire Third Party Wind Generation Project by March 26, 2015.

Clean Diesel Retrofit Project Plan

On September 2, 2010, USEPA approved Westar's Clean Diesel Retrofit Project Plan.

Westar has selected an outside consultant to help effectively manage this project. On April 4, 2011, Westar entered into a contract with the Kansas Association of Conservation and Environmental Education (KACEE) to facilitate this project on Westar's behalf.

During the Report Period, 48 buses were retrofitted with approved equipment. The verification process is currently underway.

During calendar year 2012, which includes this Report Period, Westar spent \$213,306.00 on this Project.

Despite efforts on our behalf by KACEE, significant challenges have been encountered in identifying willing participants. We believe that these challenges stem from several factors including:

- An overlap with the KDHE Clean Diesel Program, resulting in two programs targeting the same limited pool of participants;
- School Districts unwilling to implement the educational component of the project;
- Application and education process being more complicated that stakeholders are interested in undertaking; and
- Many Districts are replacing older buses with newer models having better emission equipment.


Plug-In Hybrid Infrastructure

On May 2, 2012, Westar submitted a Plug-In Hybrid Infrastructure Plan (PIHIP) to the EPA. EPA approved the PIHIP on May 22, 2012. Westar plans to spend up to \$600,000 to install 30 public electric vehicle supply equipment (EVSE). Westar will collaborate with state and local governments to identify the most beneficial locations for the EVSE stations, which may include large commercial businesses, high traffic corridors, parking lots, and rest areas served by the Kansas Turnpike Authority and Kansas Department of Transportation. In addition, working through a contractor, Westar will use the Argonne National Laboratory Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) model to quantify emissions savings between traditional vehicles and the alternative vehicles (plug-in hybrids and battery electric vehicles).

During this Report Period, work was completed on the development of the vehicle emissions model.

During calendar year 2012, which includes this Report Period, Westar spent \$57,598.00 on this Project.

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.



John Bridson
Vice President, Generation